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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/591,805	01/09/2007	Markus Pernegger	PERNEGGER ET AL-1 PCT	4737

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EXAMINER	
DANG, KET D	

ART UNIT	PAPER NUMBER
3742	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/591,805	PERNEGGER ET AL.	
	Examiner	Art Unit	
	KET D. DANG	3742	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *09 January 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☐ Claim(s) *1-28* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-28* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *06 September 2006* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This office action is responsive to the amendment filed on June 29, 2009. As directed by the amendment: claims 1-27 have been amended. Thus, claims 1-28 are presently pending in this application.

Priority

2. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in Austria Parent Application No. A 401/2004, filed on March 9, 2004.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "a start signal" in claim 1, page 7 at lines 13-15. There is insufficient antecedent basis for this limitation in the claim. It is suggested to use the word "the start signal" or "said start signal" for the limitation.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 1-8 and 16 -26 are rejected under 35 U.S.C. 103(a) as being unpatentable over DeCoster et al. (US 6,103,994) in view of Nishida (JP58-068476 A).

7. Regarding claims 1, 19, 22, and 25, DeCoster et al. disclose a method of controlling a welding apparatus 10 (Fig. 1) whereby individual welding parameters are set by the user in the form of a welding job 14 (Fig. 1) for a specific welding process by means of a first control unit 12 (Fig.1) hard-wired to or integrated in the welding apparatus, and several such welding jobs 14 (Fig. 1) are stored in a memory device 18 (Fig. 1) the welding apparatus 10 (Fig. 1) or the components of a welding system are the parameters stored in the memory device, a start signal is sent to the control system in order to initiate the welding operation, wherein the several welding jobs 14 (Fig. 1) are stored in the memory device 18 (Fig. 1) in a defined sequence so that the operator chooses his designated welding job by creating a control signal (Col. 2, lines 29-57) in a standardized control sequence, thereby one of the welding jobs 90, 92, 94, 96 (Fig. 2), stored in the memory device, is chosen by the operator by switching through the welding jobs, stored in the memory device18 (Fig. 1), or alternatively the operator uses the previously chosen welding job (Col. 5, lines 45-54); a control system for a welding apparatus 10 (Fig 1), comprising a first control 12 (Fig. 1), a microprocessor controller 16 (Fig. 1), comprising a memory device 18 (Fig. 1) and a power component 20 (Fig. 1), and the different parameters (Abstract) are set in the form of welding jobs 14 (Fig. 1) 50 (Fig. 2) by means of the first control unit and the welding apparatus 10 (Fig 1) is activated by the power component 20 (Fig. 1) on the basis of these parameters 50 (Fig. 2), and a second control unit 28 (Fig. 1) on which a push-button element 14 (Fig. 1) 50

(Fig. 2) is disposed for generating a start signal, in particular for running the method according to claim 1, is provided on the welding torch (Col. 4, lines 25-29) of the welding apparatus which is hard-wired to the microprocessor controller 16 (Fig. 1),and the microprocessor controller 16 (Fig. 1).

DeCoster et al. fail to disclose the signal from a push-button element of the second control unit.

However, Nishida teaches the signal from a push-button element (abstract) of the second control unit 7 (fig. 2). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention was made to modify the DeCoster's reference, to include the signal from a push-button element of the second control unit, as suggested and taught by Nishida, for the purpose of improving down time when switching to a different welding parameter.

8. Regarding claims 2-8, DeCoster et al. disclose the claimed invention, including wherein the parameters for an individual welding job are organized in parameter groups 50 (Fig. 2, for example, memory group) (Col. 5, lines 11-25), and the different welding jobs are stored in the memory device 18 (Fig. 1) in a fixed sequence 60, 62, 64, & 66 (Fig. 2); wherein the welding jobs are stored in the memory device so that they are clearly identified (See memory arrangement in figure 2); wherein the welding jobs are organized in individual job groups from which at least one welding job is retrieved (Col. 4, lines 55-63); wherein the job groups containing one or more welding jobs (Col. 7, lines 1-12) are stored in the memory device 18 (Fig. 1) so that they are separated from one another by means of empty jobs, in other words a welding job in which no

parameters have been set (Col. 7, lines 62-67); wherein at the end of a job group, the last welding job is stored in the memory device with an indicator 56/58 (Fig. 2) for a separator signal; wherein the curve of the output signal of the push-button, in particular the push-button element, is used to define the control signal (Col. 5, lines 35-48), and the start signal on the basis of its frequency 76 (Fig. 2); wherein a comparison is run between the output signal generated by the push-button or push-button element (Col. 8, lines 12-28) and several possible control signals previously set up in the memory device 18 (Fig. 1) (Col. 6, lines 13-20), and the start signal on the basis of their frequency 76 (Fig. 2).

9. Regarding claims 16-18, DeCoster et al. disclose the claimed invention, including wherein a check (Col. 8, lines 12-28) is run on the selected welding jobs by the microprocessor controller 16 (Fig. 1) to ensure that threshold values of the individual parameters have been complied with and a visual warning 50 (Fig. 2) (Col. 5, lines 7-10) is emitted by the first control unit; wherein the parameters of the respective welding job selected are displayed 50 (Fig. 1) by the first control unit; and wherein during a welding operation, a selection and switch are made between the individual welding jobs by means of the control signal generated by the second control unit 28 (Fig. 1) (Col. 6, lines 13-20).

10. Regarding claims 20-21, 23-24, and 26-28, DeCoster et al. disclose the claimed invention, including wherein the parameters for the welding jobs 50 (Fig. 2) are stored in the memory device 18 (Fig. 1) in parameter groups; wherein the individual welding jobs are separated from one another by empty groups; wherein the visual output device 50

(Fig. 2) is provided in the form of one or more control lamps, (Col. 5, lines 57-62); wherein the visual output device is provided in the form of a display (Col. 5, lines 7-10); wherein the first control unit 12 (Fig. 1) has an input device 14 (Fig. 1) as well as a visual output device (Col. 5, lines 7-10) for warning messages or information and is hard-wired to the microprocessor controller 16 (Fig. 1) (Col. 3, lines 57 – Col. 4, lines 9); and wherein the first control unit 12 (Fig. 1) and the microprocessor controller 16 (Fig. 1) are provided in the form of a standard computer, separate from the welding apparatus 10 (Fig. 1), via an appropriate interface 14 (Fig. 1) as a means of controlling a MIG (TIG/WIG) (Col. 7, lines 5-8) welding apparatus.

11. Claims 9-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over DeCoster et al. (US 6,103,994).

12. Regarding claims 9- 15, DeCoster et al. disclose all the claimed invention, except for wherein the start signal for starting the welding process is defined by a longer depression of the push-button than the control signal for selecting the welding job 50 (Fig. 2) (Col. 1, lines 35-46); wherein, on an appropriate control signal, in particular if the push-button element 74/76 (Fig. 2) is depressed for a shorter time, the next welding job in the sequence is selected from the memory device (See the recitation of DeCoster as follows:

> "A plurality of memory selectors 90, 92, 94, 96 allow the operator to save in memory 18 various configurations of the parameter selectors. Each memory selector may be pressed to recall from memory 18 to control circuit 16 a set of previously selected or programmed operating

parameters, some or all of which control circuit 16 can communicate to control panel 50 for display to the operator".

The above recitation is read on to claim 9-15, see motivation below); wherein, on an appropriate control signal, after the last welding job stored in the memory device , the first welding job stored in this job group is selected (Col. 6, lines 41-67); wherein, on an appropriate control signal, in particular if the push-button element is depressed for a medium length of time, the next job group in the sequence after the last empty group (Col. 6, lines 41-67); wherein, on an appropriate control signal, the next job group in the sequence after the preceding empty group is selected from the memory device (See the recitation of DeCoster above); wherein, on an appropriate control signal, the first job group stored in the memory device is selected (See the recitation of DeCoster above); and wherein any number of jobs are defined by the user in a job group 14 (Fig. 1). It would have been obvious to one having ordinary skill in the art at the time the invention was made to suggest that welding jobs stored in memory can be programmed or configured to read in any order as operator desires by simply pressing and holding the push-button for the length of time is needed to select particular welding job, either first job or last job or middle job and so on, since it has been held that constructing a formerly integral structure in various elements involves only routine skill in the art. Nerwin v. Erlichman, 168 USPQ 177, 179.

13. Claims 27 & 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over DeCoster et al. (US 6,103,994) in view of Nishida (JP58-068476 A) and further in view of Brunner et al. (US 6,570,132 B1).

14. Regarding claims 27 & 28, DeCoster and Nishida disclose the claimed invention, except for a standard computer and a MAG welding. However, Brunner et al. teach a standard computer (Col. 6, lines 48-53) and a MAG welding (Col. 3, lines 27-31). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention was made to modify the DeCoster and Nishida's references, to include a standard computer and a MAG welding, as suggested and taught by Brunner, for the purpose of allowing welding operator to modify or change inputs of welding parameters more effectively, and also be able to exchange data and communicate with other welding units, and also other welding type such as a MAG welding (Col. 6, lines 37-48).

Response to Amendment/Arguments

14. Applicant's amendments have overcome the abstract objection and 35 U.S.C. 112 2nd paragraph rejections from the first non-final Office Action.

Applicant's arguments with respect to claim 1 has been considered but are moot in view of the new ground(s) of rejection, the reason is provided in great details as set forth in rejections above.

Conclusion

15. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KET D. DANG whose telephone number is (571) 270-7827. The examiner can normally be reached on Monday - Friday, 7:30 - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoang Tu can be reached on (571) 272-4780. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Ket Dang
/KET D DANG/

Examiner, Art Unit 3742
November 16, 2009
/TU B HOANG/
Supervisory Patent Examiner, Art Unit 3742